

REMARKS

This Amendment is in response to the Office Action of June 26, 2007 in which claims 1-33 were rejected.

Regarding the statutory subject matter rejection of claims 17 and 18, they have been amended to include the "computer readable medium" limitation. Withdrawal of the statutory subject matter rejection is requested.

Claims 1-3, 6-22 and 25-33 are rejected under 35 U.S.C. Section 103(a) as being unpatentably obvious over *Takagi et al* (US 6,272,148) in view of *Apisdorf et al* (US 6,480,977).

The Examiner points to the abstract and the first paragraph of the Summary of Invention bridging the end on column 3 and the beginning of column 4. As admitted by the Examiner, the cited passages do not show monitoring data traffic of a transport layer protocol connection and dynamically adjusting a transmission capacity of a bearer according to the monitored data traffic of the transport layer protocol connection.

However, the Examiner points to *Apisdorf et al* for showing the monitoring of data traffic of a transport layer protocol connection, pointing to the abstract as well as the field of invention paragraph in column 1, lines 6-9 and the Background of the Invention section at column 1, lines 49-60 as well as the first five lines of the Summary of Invention section at the end of column 1.

The *Takagi et al* reference has been studied carefully and applicant agrees with the Examiner that there is no monitoring of data traffic of a transport layer protocol connection nor is there any dynamic adjusting of transmission capacity of a

bearer according to the monitored data traffic of the transport layer protocol connection.

The *Apisdorf et al* reference has also been studied carefully and it is not correct for the Examiner to state that *Apisdorf et al* teach monitoring data traffic of a transport layer protocol connection. The monitoring function shown by *Apisdorf et al* has to do with a data link layer (ATM) and a physical layer (SONET). There is no hint or suggestion of transport layer monitoring.

Moreover, the independent claims have been amended to make it clear that the monitoring is of transport layer data traffic and that the monitoring is relation to transmission capacity of the transport layer protocol connection. The limitations of claims 4 and 5, not rejected in the obviousness rejection in sections 5 and 6 of the detailed action, have also been added to claim 1, without prejudice.

Withdrawal of the novelty rejection of claim 1 is requested.

Regarding claim 3, this does not pertain to signalling transmission capacity adjustment information from at least one TLP instance to at least one bearer instance (the Examiner citing column 6, lines 47-65). Rather, this has to do with splitting a TPC connection into separate connections for the wired and wireless parts of the path, which *Takagi et al* discusses briefly beginning at column 1, lines 60 through column 2, line 13. This involves having a network element behave to the sender as if it were the end point, i.e., sending back acknowledgements before the packet actually traverses a wireless link to the intended mobile terminal end point. As mentioned by *Takagi et al*, this involves a violation of the end-to-end semantics of the application layer protocols utilizing TCP. This has nothing to do with the present invention which has to do with monitoring transport layer data traffic in relation to transmission capacity and dynamically adjusting that transmission capacity according to the monitored data traffic of the transport layer protocol connection.

Regarding claim 4, now part of claim 1, there is nothing in the cited passages of *Ahmed et al* except physical layer and data link layer discussions of the uplink and downlink bandwidth sharing among the large number of mobile terminals. Claim 4's limitations have been added to claim 1.

Regarding claim 5, now part of claim 1, it is not seen where the asymmetric nature of the connection segments is shown at column 8, lines 10-26 of *Ahmed et al*.

Regarding claim 6, there is no monitoring of transport layer data traffic in relation to transmission capacity in the cited passage beginning at column 2, line 65 through column 3, line 8. Rather, this has to do with the situation mentioned above where the path has been split between the wired side and the wireless side and consideration is given to a case where the intermediate gateway sends an "acknowledge" back to the transmitting side terminal before the transmission of that data to the intended receiver actually succeeds. In that case, the original transmitting side terminal discards the data from its re-transmission buffer upon receiving such an acknowledgement message from the intermediate gateway so that it then becomes impossible to retransmit that data in case the wireless part of the link fails. This does not have anything to do with what is claimed in claim 6.

A similar statement may be made about what is claimed in claim 7 versus what is shown by *Takagi et al*. The passage cited by the Examiner in column 18, lines 9-21 deals with what occurs at an intermediate network element in a handoff situation and does not have anything to do with monitoring transport layer data traffic in relation to transmission capacity or dynamically adjusting such transmission capacity according to the monitored data traffic.

Regarding claims 10-12, the cited passages of *Takagi et al* at column 11, lines 12-23 and the cited passages of *Apisdorf et al* at column 2, lines 10-21, do not show or suggest the limitations of claim 10. Rather, the paragraph in column 11 of *Takagi et al* discusses the contents of the TCP layers of Fig. 1 with the 600 level reference numerals, none of which show or suggest the monitor 107 disclosed in Fig.

2 of the present disclosure. Regarding *Apisdorf et al* at column 2, lines 10-21, there is a discussion of cells and packets but nothing about the limitations of claim 10.

Regarding claim 11, the citation of Takagi et al at column 4, lines 1-10 reveals control over transport layer connection according to the radio communication state between the radio terminal and a base station but does not disclose adjustments according to any monitored data traffic or any change in a maximum number of traffic channels or an air interface user rate parameter.

Regarding claim 12, the citation of column 14, lines 4-15 of *Takagi et al* is inapplicable because there is no mention of a call control user initiated service level up-and-downgrading procedure.

Regarding claim 13, there is nothing in the cited passage at column 1, lines 30-38 that show or suggest GPRS or EGPRS or GSM.

The portion of the *Apisdorf et al* at column 1, lines 49-60 contains a reference to baseline traffic flows but this is different from what is claimed in claim 14 which claims adjusting the capacity of the bearer according to monitored data traffic of the transport layer protocol connection by influencing a temporary block flow setup. Temporary block flow is different from traffic flow.

Regarding claim 15, the passage at column 31, lines 7-18 does not mention code division multiple access or IS-95.

Regarding claim 16, column 11, lines 12-23 of *Takagi et al* does not mention UMTS.

Regarding claims 17 and 18, the same comments made above about claim 1 apply here as well.

Regarding claim 19, the same comments made above in connection with independent claim 1 apply here as well.

Regarding claim 20, the same comments made above in connection with independent claim 1 apply here as well. The same comments made above in connection with the dependent claims of claims 20 and 21 apply equally to the comments made above.

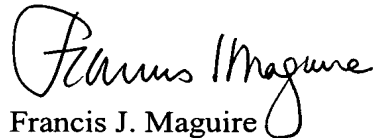
Regarding the 35 U.S.C. § 103(a) rejection of claims 23-24 based on *Takagi et al* in view of *Apisdorf et al* as applied to claim 20, and in further in view of *Ahmed et al*, these claims depend from claim 20 and are at least patentable for the same reasons as given above in connection with claim 20. The limitations of claims 23 and 24 have been added to claim 20 and therefore have been cancelled. The same comments made above in connection with claims 4 and 5 apply equally to claims 23 and 24. Withdrawal of the rejection of claims 23 and 24 is requested.

Regarding claims 25-33, these correspond to comparable dependent claims of method claim 1 discussed above and those remarks of applicant apply equally to these claims.

For at least these reasons also, the obviousness rejection of claims 1-3, 6-22 and 25-33 should be withdrawn.

The objections and rejections of the Office Action of June 26, 2007, having been obviated by amendment or shown to be inapplicable, withdrawal thereof is requested and passage of claims 1-3, 6-22 and 24-33 to issue is solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Francis J. Maguire". The signature is fluid and cursive, with the first name "Francis" being more prominent than the last name "Maguire".

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